

# EWP127A

EWP127A, HELIAX® Premium Elliptical Waveguide, 11.7–13.25 GHz, black PE jacket



## Product Classification

<b>Product Type</b>	Elliptical waveguide
<b>Product Brand</b>	HELIAX®

## General Specifications

<b>Jacket Color</b>	Black
<b>Performance Note</b>	Values typical, unless otherwise stated

## Dimensions

<b>Diameter Over Jacket (E Plane)</b>	28.2 mm   1.11 in
<b>Diameter Over Jacket (H Plane)</b>	17.1 mm   0.673 in
<b>Cable Volume</b>	251 L/km   2.702 ft <sup>3</sup> /kft

## Electrical Specifications

<b>eTE11 Mode Cutoff</b>	7.67 GHz
<b>Group Delay at Frequency</b>	128 ns/100 ft @ 12.700 GHz   419 ns/100 m @ 12.700 GHz
<b>Operating Frequency Band</b>	11.7 – 13.25 GHz

## VSWR/Return Loss

Frequency Band	VSWR	Return Loss (dB)
11.7–12.2 GHz	1.08	28.3

## Attenuation

Frequency (GHz)	Attenuation (dB/100 m)	Attenuation (dB/100 ft)	Average Power (kW)	Group Velocity %
11.7	12.276	3.742	1.196	75.5
11.95	12.086	3.684	1.214	76.7

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12.2	11.918	3.633	1.232	77.8
12.45	11.769	3.587	1.247	78.8
12.7	11.634	3.546	1.262	79.7
12.95	11.514	3.509	1.275	80.6
13.2	11.405	3.476	1.287	81.4

## Material Specifications

<b>Conductor Material</b>	Corrugated copper
<b>Jacket Material</b>	PE

## Mechanical Specifications

<b>Minimum Bend Radius, Multiple Bends (E Plane)</b>	150 mm   5.906 in
<b>Minimum Bend Radius, Multiple Bends (H Plane)</b>	380 mm   14.961 in
<b>Minimum Bend Radius, Single Bend (E Plane)</b>	130 mm   5.118 in
<b>Minimum Bend Radius, Single Bend (H Plane)</b>	280 mm   11.024 in
<b>Maximum Twist</b>	6.562 °/m   2 °/ft

## Environmental Specifications

<b>Installation temperature</b>	-40 °C to +60 °C (-40 °F to +140 °F)
<b>Operating Temperature</b>	-55 °C to +85 °C (-67 °F to +185 °F)
<b>Storage Temperature</b>	-70 °C to +85 °C (-94 °F to +185 °F)
<b>Attenuation, Ambient Temperature</b>	75 °F   23.889 °C
<b>Average Power, Ambient Temperature</b>	104 °F   40 °C
<b>Average Power, Temperature Rise</b>	42 °C   107.6 °F

## Packaging and Weights

<b>Cable weight</b>	0.43 kg/m   0.289 lb/ft
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## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system

